

A method of measuring the propagation time T_p of a signal, in particular an ultrasound signal, between two spaced-apart transducers constituting an emitter and a receiver is measured. The emitter transducer is subjected to an excitation signal of comprising n successive pulses of period T_e giving rise to an ultrasound signal being emitted towards the receiver transducer which receives - the ultrasound signal generating and outputting generates a receive signal which is output by the receiver transducer. A measurement of an intermediate propagation time T_{int} is started when the emitter transducer begins to be excited. The receive signal output by the receiver transducer is detected and the oscillations in said the receive signal are counted. Measurement of the intermediate propagation time T_{int} is stopped when an i^{th} oscillation is detected. The propagation time T_p of the signal is determined by taking the difference $T_{int} - i \times T_e$. Advantageously, measurement of the intermediate propagation time T_{int} is stopped for an i^{th} oscillation of the receive signal that corresponds to the receive signal being at a maximum amplitude.